



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,065	06/25/2003	Masuhiko Natsuhara	39.015-AG	1064
29453	7590	12/01/2005	EXAMINER	
JUDGE PATENT FIRM RIVIERE SHUKUGAWA 3RD FL. 3-1 WAKAMATSU-CHO NISHINOMIYA-SHI, HYOGO, 662-0035 JAPAN			KACKAR, RAM N	
			ART UNIT	PAPER NUMBER
			1763	
DATE MAILED: 12/01/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,065	Applicant(s) NATSUHARA ET AL.	
	Examiner Ram N. Kackar	Art Unit 1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>none</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Niori et al (US 5280156).**

Niori et al disclose a wafer holder having an electrical circuit inside it (Fig 8) and electrodes to supply power to the heating circuit (8) and an electrode to supply power to the electrostatic chuck (7A). The electrodes supplying power to the heating circuit appear to be at the periphery (8) and to the chuck at the center. The 10% of thickness would typically be 1-2 mm. The spacing between the electrodes therefore (typically 75-100 mm) would be several times the minimum required distance. The material of the wire 8 is disclosed to be tungsten.

The newly added limitation of the temperature uniformity being within ± 1 percent is an intended use limitation and does not point to any structure. However since the uniformity is presumably due to the structure claimed and found in the prior art, disclosed prior art is capable of this functional limitation.

3. **Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Soma et al (US 5231690).**

Soma et al disclose a wafer holder having an electrical circuit inside it (Fig 2, 3A and 3B) and electrodes to supply power to the circuit (8). The electrodes supplying power to the circuit

Art Unit: 1763

appear to be at the center and at the periphery (8). The 10% of thickness would typically be 1-2 mm. The spacing between the electrodes therefore (typically 75-100 mm) would be several times the minimum required distance. The material of the wire 8 is disclosed to be tungsten.

As above, the newly added limitation of the temperature uniformity being within ± 1 percent is an intended use limitation and does not point to any structure. However since the uniformity is presumably due to the structure claimed and found in the prior art, disclosed prior art is capable of this functional limitation.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawanabe et al (US 6133557).

Kawanabe et al disclose a wafer holder having an electrical circuit inside it (Fig 3A-12) and electrodes to supply power to the circuit (13). The wafer holder is 200mm diameter and 10mm thick (Col 13 lines 53-55). The electrodes supplying power to the circuit appear to be at the corners. The 10% of thickness is 1mm. The spacing between the electrodes therefore would be several times the minimum required distance.

As above, the newly added limitation of the temperature uniformity being within ± 1 percent is an intended use limitation and does not point to any structure. However since the uniformity is presumably due to the structure claimed and found in the prior art, disclosed prior art is capable of this functional limitation.

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Noboru Kimura (US 5331134).

Kimura discloses a wafer holder having an electrical circuit on one side (Fig 4) and electrodes to supply power to the circuit at diametrically opposite ends on the wafer holder (4). The wafer holder is typically 200mm diameter and 10-20 mm thick. The 10% of thickness is 1-2 mm. The spacing between the electrodes therefore would be several times the minimum required distance.

As above, the newly added limitation of the temperature uniformity being within ± 1 percent is an intended use limitation and does not point to any structure. However since the uniformity is presumably due to the structure claimed and found in the prior art, disclosed prior art is capable of this functional limitation.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawanabe et al in view of Shamoulian et al (US 6572814).**

Kawanabe et al disclose a wafer holder having an electrical circuit inside it (Fig 3A-12) and electrodes to supply power to the circuit (13). The wafer holder is 200mm diameter and 10mm thick (Col 13 lines 53-55). The electrodes supplying power to the circuit appear to be at the corners. The 10% of thickness is 1mm. The spacing between the electrodes therefore would be several times the minimum required distance.

Art Unit: 1763

Kawanabe et al do not disclose the material of the electrode supplying power to the heater element.

Shamoulian et al disclose that the electrodes for supplying power to electrodes could be tungsten or molybdenum (Col 7 lines 14-18).

Therefore it would have been obvious for one of ordinary skill in the art to have power supply electrodes to be made of tungsten or molybdenum for their use at high temperatures.

Response to Arguments

Applicant's arguments filed 9/28/2005 have been fully considered but they are not persuasive.

Applicant argues that Soma et al and Kawanabe et al show no recognition of the problem faced by the applicants, namely high temperature uniformity.

In response it is noted that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function.

In re Danley, 120 USPQ 528, 531, (CCPQ 1959); "Apparatus claims cover what a device is, not what a device does" (Emphasis in original) *Hewlett-Packard Co. V. Bausch & Lomb Inc.*, 15USPQ2d 1525, 1 528 (Fed. Cir. 1990); and a claim containing a (recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Also see MPEP 2114.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram N. Kackar whose telephone number is 571 272 1436. The examiner can normally be reached on M-F 8:00 A.M to 5:P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571 272 1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1763

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Ram", followed by a horizontal line.

Ram Kackar AU 1763